



802.11a/b/g Wireless LAN Outdoor AP

WAP-8000

User's Manual

Version 1.1



Copyright

Copyright© 2009 by PLANET Technology Corp. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of PLANET.

PLANET makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, this company reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes..

All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

FCC Caution

To assure continued compliance. (Example-use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the Following two conditions: (1) This device may not cause harmful interference, and (2) this Device must accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1, EN 301 489-17 and EN 55024 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2

Testing for radio test suites according to EN 300 328-2 has been conducted. These are considered relevant and sufficient.

CE in which Countries where the product may be used freely:

Germany, UK, Italy, Spain, Belgium, Netherlands, Portugal, Greece, Ireland, Denmark, Luxembourg, Austria, Finland, Sweden, Norway and Iceland.

France: except the channel 10 through 13, law prohibits the use of other channels

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

WEEE regulation



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Revision

User's Manual for PLANET 802.11a/b/g WLAN Outdoor AP
Model: WAP-8000
Rev: 1.1 (March, 2009)
Part No. EM-WAP8000

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION.....	5
1.1 Package Contents.....	5
1.2 Features	5
1.3 Specification.....	6
1.4 Wireless Performance	7
CHAPTER 2 HARDWARE INSTALLATION	9
2.1 Outlook.....	9
2.2 Hardware Installation.....	10
CHAPTER 3 WEB CONFIGURATION.....	14
CHAPTER 4 STATUS.....	16
CHAPTER 5 NETWORK	18
5.1 Wireless Settings.....	18
5.2 IP Settings	19
5.3 Antenna Settings.....	20
5.4 DHCP Settings	20
CHAPTER 6 DEVICE	21
6.1 Bandwidth	21
6.2 Firmware Upgrade	21
6.3 Device Reboot	22
6.4 Backup / Restore	22
6.5 Hostname	23
CHAPTER 7 SECURITY	24
7.1 Access Control	24
7.2 SNMP Settings	24
7.3 Password Settings	25
CHAPTER 8 LOCALIZATION.....	26
8.1 NTP Settings.....	26
8.2 Country Code Settings	26

Chapter 1 Introduction

The WAP-8000 is an outdoor 802.11a/b/g Outdoor wireless AP with N-type antenna connector. This manual describes the details of how to manage this equipment.

1.1 Package Contents

Make sure that you have the following items:

- WAP-8000 x 1
- PoE Injector x 1
- Power Adapter x 1
- Mounting Kit (with screw package) x 1
- Waterproof connector x 1
- CD x 1
- Quick Installation Guide x 1

Note: If any of the above items are missing, contact your supplier as soon as possible.

1.2 Features

- IEEE 802.11a/b/g Dual Standards Compatible
- Provides protection against rigorous weather conditions
- Wide range temperature for lower or higher environment.
- High output power up to 400mW with multiple adjustable transmit power control
- Data rate up to 108Mbps with Super A/G mode
- Power over Ethernet design
- N-type Antenna connector for various installation
- Multiple Wireless Access Modes: AP, AP Client, Bridge, WISP
- MAC filtering
- Supports WEP 64/128, WPA- PSK, WPA2-PSK Authentication
- SNMP management

1.3 Specification

Standard support	IEEE802.11b/g IEEE802.3/u
Interface	Wireless IEEE802.11a/b/g LAN: 1x 10/100BaseTX, Auto-MDI/MDIX
Data Rate	802.11b: Up to 11Mbps 802.11a/g: 54Mbps; up to 108Mbps (Super A/G mode)
Modulation	BPSK, QPSK, CCK and OFDM
Frequency Range	IEEE802.11b/g: 2412 ~ 2462MHz (N.A) 2412 ~ 2472MHz (EU) 2412 ~ 2484MHz (Japan) IEEE802.11a: 5150MHz – 5250MHz (Japan) 5150MHz–5350MHz / 5470MHz – 5725MHz (Europe) 5150MHz –5350MHz / 5725MHz – 5850MHz (USA)
Opt. Channel	IEEE802.11b/g: 1 ~ 11 channels (North America) 1 ~ 13 channels (General Europe) 1 ~ 14 channels (Japan) IEEE802.11a: 4 Channels (Japan) 19 Channels (Europe) 13 Channels (USA)
RF Output Power	11b:11Mbps @ 25dbm 2Mbps @ 25dbm 11g: 54Mbps @ 22dbm 6Mbps @ 25dbm 11a: 54Mbps @ 18dbm 6Mbps @ 21dbm
Receiver Sensitivity	802.11b: 11Mbps (CCK): -82dBm 5.5Mbps (CCK): - 86dBm 1, 2Mbps (BPSK, QPSK): - 90dBm (typically @PER < 8% packet size 1024 and @25°C + 5°C)

	802.11a/g: 54Mbps (64QAM): -66dbm 48Mbps (64QAM): -71dbm 36Mbps (16QAM): -78dbm 24Mbps (16QAM): -80dbm 18Mbps (QPSK): -81dbm 12Mbps (QPSK): -82dbm 9Mbps(BPSK): -85dbm 6Mbps (BPSK): -87dbm (typically @PER < 10% packet size 1024 and @25°C + 5°C)
Wireless Security	WEP64/128, WPA-PSK, WPA2-PSK
Case IP Code	IP 68*
Antenna	1x N-Type connector
Environmental Spec.	Operating Temperature: -40~85°C Relative Humidity: 5%~98% non-condensing Storage Temperature: -40~85°C Relative Humidity: 5%~98% non-condensing

Remark: Protection of IP 68 should be under the condition of Twisted Pair wire well tighten to the device, without well tight to the connector, the device will still be effected in different installation. Please also follow the hardware installation section for more.

1.4 Wireless Performance

The following information will help you utilizing the wireless performance, and operating coverage of WAP-8000.

1. Site selection

To avoid interferences, please locate WAP-8000 and wireless clients away from transformers, microwave ovens, heavy-duty motors, refrigerators, fluorescent lights, and other industrial equipments. Keep the number of walls, or ceilings between AP and clients as few as possible; otherwise the signal strength may be seriously reduced. Place WAP-8000 in open space or add additional WAP-8000 as needed to improve the coverage.

2. Environmental factors

The wireless network is easily affected by many environmental factors. Every environment is unique with different obstacles, construction materials, weather, etc. It is hard to determine the exact operating range of WAP-8000 in a specific location without testing.

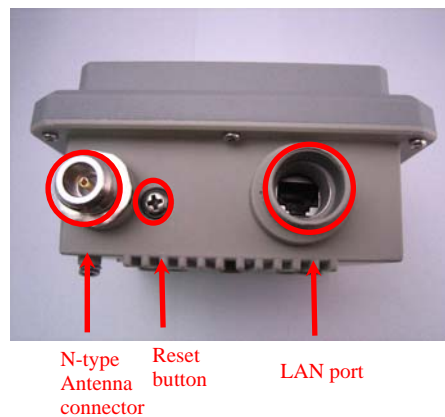
Chapter 2 Hardware Installation

2.1 Outlook

1. On the back panel of WAP-8000, there are LEDs indication (LAN, WLAN, PWR).



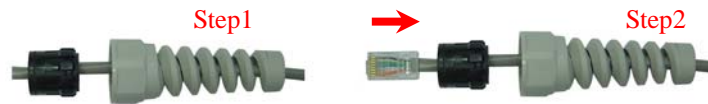
2. On the bottom of WAP-8000, there are three interfaces. (N-type antenna connector, Reset button, LAN port).



2.2 Hardware Installation

Before you proceed with the installation, it is necessary that you have enough information about WAP-8000.

1. Plug in the waterproof connector on RJ-45 cable.

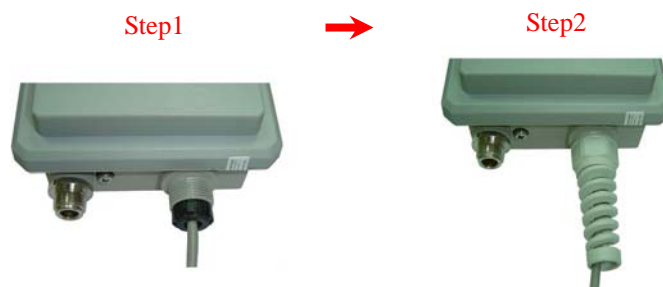


2. Connect RJ-45 cable with waterproof connector to the LAN port of WAP-8000 and another way connect to the "PoE" port of PoE Injector. Connect antenna to N-type antenna connector.

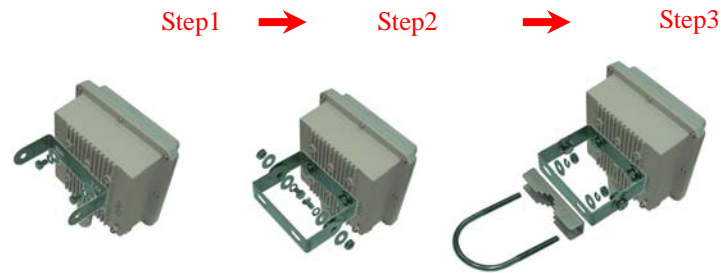


Note: Strongly suggest using SFTP cable, for better protection of the data wire. 25-meter SFTP cable also available by order, the part no is CB-STP-25. Please contact with local dealer for more information

3. Lock waterproof connector into outside circle of the LAN port.



4. Locate an optimum location and use the provided Mounting kit to tie the WAP-8000 to a pole.



Note: For secured reason, while install the CPE AP, please be aware for the electric wires around, and tighten the pole.

Without tighten the CPE AP, the pole and the installed site is with electric wire around, there could be danger of being hurt by falling or lethal injury.

5. Connect the “LAN” port of PoE Injector to Ethernet hub, switch or PC on the same LAN for management.
6. Connect the power adapter to the PoE Injector, and plug it into an AC outlet to power on the WAP-8000.

Note1: ONLY use the power adapter supplied with the WAP-8000. Otherwise, the product may be damaged.

Note2: Strongly suggest using SFTP cable whether the cable exposed outdoor for waterproof and avoiding thunder stroke.

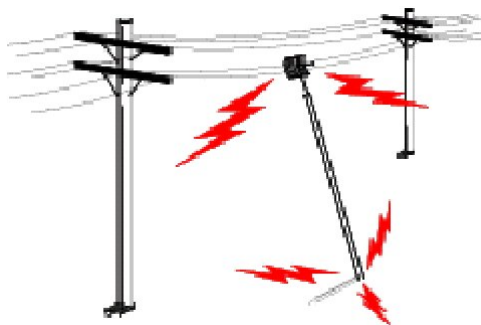


TDOOR INSTALLATION WARNING

IMPORTANT SAFETY PRECAUTIONS:

LIVES MAY BE AT RISK! Carefully observe these instructions and any special instructions that are included with the equipment you are installing.

CONTACTING POWER LINES CAN BE LETHAL. Make sure no power lines are anywhere where possible contact can be made. Antennas, masts, towers, guy wires or cables may lean or fall and contact these lines. People may be injured or killed if they are touching or holding any part of equipment when it contacts electric lines. Make sure there is NO possibility that equipment or personnel can come in contact directly or indirectly with power lines.



Assume all overhead lines are power lines.

The horizontal distance from a tower, mast or antenna to the nearest power line should be at least twice the total length of the mast/antenna combination. This will ensure that the mast will not contact power if it falls either during installation or later.

TO AVOID FALLING, USE SAFE PROCEDURES WHEN WORKING AT HEIGHTS ABOVE GROUND.

- Select equipment locations that will allow safe, simple equipment installation.
- Don't work alone. A friend or co-worker can save your life if an accident happens.
- Use approved non-conducting ladders and other safety equipment. Make sure all equipment is in good repair.
- If a tower or mast begins falling, don't attempt to catch it. Stand back and let it fall.
- If anything such as a wire or mast does come in contact with a power line, **DON'T TOUCH IT OR ATTEMPT TO MOVE IT.** Instead, save your life by calling the power company.
- Don't attempt to erect antennas or towers on windy days.

MAKE SURE ALL TOWERS AND MASTS ARE SECURELY GROUNDED, AND ELECTRICAL CABLES CONNECTED TO ANTENNAS HAVE LIGHTNING ARRESTORS. This will help prevent fire damage or human injury in case of lightning, static build-up, or short circuit within equipment connected to the antenna.

- The base of the antenna mast or tower must be connected directly to the building protective ground or to one or more approved grounding rods, using 1 OAWG ground wire and corrosion-resistant connectors.

- Refer to the National Electrical Code for grounding details.

IF A PERSON COMES IN CONTACT WITH ELECTRICAL POWER, AND CANNOT MOVE:

- **DON'T TOUCH THAT PERSON, OR YOU MAY BE ELECTROCUTED.**
- Use a non-conductive dry board, stick or rope to push or drag them so they no longer are in contact with electrical power.

Once they are no longer contacting electrical power, administer CPR if you are certified, and make sure that emergency medical aid has been requested.

Chapter 3 Web configuration

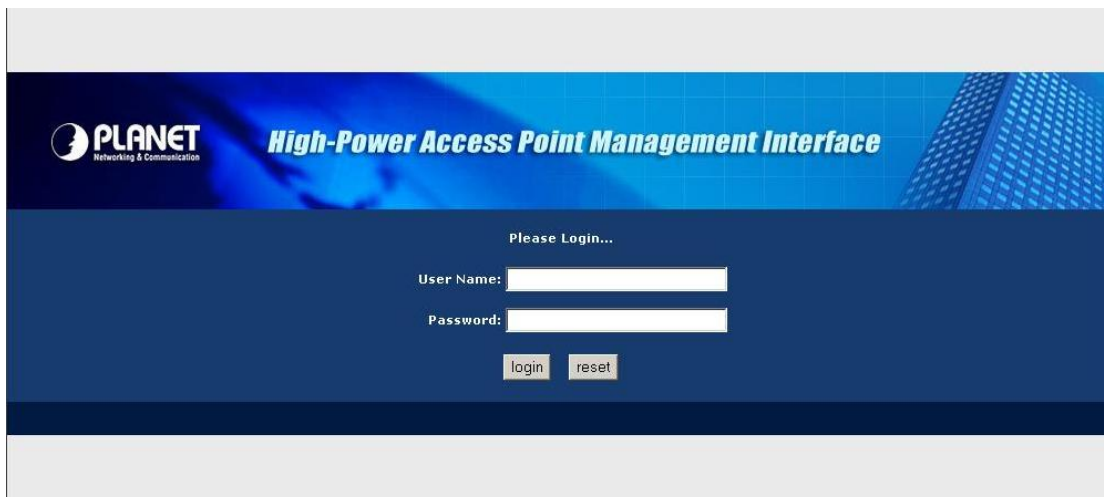
Web configuration provides a user-friendly graphical user interface (web pages) to manage your WAP-8000. An AP with an assigned IP address will allow you to monitor and configure via web browser.

Open your web browser. Enter the IP address of your WAP-8000 in the address field (default IP address is <http://192.168.1.1>). Please note that your PC's IP address should be on the same IP subnet of the WAP-8000 (Please follow below title: Assign a static IP address to set same IP subnet).

Default IP Address: <http://192.168.1.1>

Default IP subnet mask: **255.255.255.0**

WEB login User Name / Password: **admin**



The screenshot shows the login page of the Planet High-Power Access Point Management Interface. The header features the Planet logo and the title "High-Power Access Point Management Interface". Below the header, there is a "Please Login..." prompt. The login form includes fields for "User Name:" and "Password:", each followed by a text input box. At the bottom of the form, there are two buttons: "login" and "reset".

Assign a static IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

1. - Windows Vista® - Click on Start > Control .Panel > Network .and .Internet > Network .and .Sharing .Center > Manage Network Connections.
- Windows® XP - Click on Start > Control .Panel > Network Connections.
- Windows® 2000 - From the desktop, right-click My Network Places > Properties.
2. Right-click on the Local Area Connection which represents your network adapter and select Properties.
3. Highlight Internet .Protocol .(TCP/IP) and click Properties.
4. Click Use .the .following .IP .address and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.
5. Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).
6. Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.
7. Click OK twice to save your settings.

Chapter 4 Status

This page shows the current status and some basic settings of the device, includes system information, wireless Configuration and security information.

System Information

The screenshot shows the web interface of a PLANET High Power Outdoor WLAN Access Point. The top header includes the PLANET logo and the title "High Power Outdoor WLAN Access Point". Below the title, it displays "Hostname: default" and "00:19, Jan 01st, 2000". A navigation bar contains tabs for Status, Network, Device, Security, and Localization, with a Logout button on the right. The left sidebar has a "Status" section with sub-tabs for System, Wireless, and Security. The main content area is titled "System Information" and contains a table with the following data:

Hostname	default
Country Code	WILDCARD
Uptime	19 min
Firmware ver.	1.29-rc6-eng
Wireless dev. MAC addr.	00-30-4f-11-23-45
Wired dev. MAC addr.	00-30-4f-11-23-46
Device temperature	38.5 °C 101.3 °F

Parameter	Description
Hostname	The name of WAP-8000.
Country Code	
Uptime	Display the Connected times of WAP-8000.
Firmware version	It shows the firmware version of WAP-8000.
Wireless Device MAC Addr.	Display the MAC Address of WAP-8000.
Wired Device MAC Addr.	Display the MAC Address of WAP-8000.
Device temperature	The temperature on CPU of WAP-8000

Wireless Information

Wireless Information

Mode	Access Point (Client List)
ESSID	Planet
Band	Auto
Channel	2.412 GHz (Channel 1)
4-addr. Headers	On
Isolate	Off
WMM	Off
Burst	N/A
Encryption	none
Power	Full power
RSSI	0

Parameter	Description
Mode	It shows wireless operation mode.
ESSID	It shows the SSID of this WAP-8000. The SSID is the unique name of WAP-8000 and shared among its service area, so all devices attempts to join the same wireless network can identify it.
Band	It shows the current wireless operating frequency.
Channel	It shows the wireless channel connected currently.
4-Address Headers	Display the “4-Address Headers” Status.(Enable or Disable)
Isolate	Show the “Isolate” function is on or off
Encryption	Display Encryption mode.
Power	Display the transmit power level.
RSSI	Display the received signal strength index.
DHCP Server	Display the “DHCP Server” Status.(Enable or Disable)

Security Information

Security Information

Access Control	None
SNMP	Enable

Parameter	Description
Access Control	It shows any access control is configured.
SNMP	It shows SNMP function status.

Chapter 5 Network

5.1 Wireless Settings

This page allows you set wireless relative parameters for your wireless network.

Network Function Settings

☒ Access Point ☐ Bridge ☐ AP Client ☐ CPE Router

SSID	Planet	<input type="checkbox"/> Hide SSID
Frequency Band	<input checked="" type="radio"/> Auto	
4-Address Headers	<input checked="" type="radio"/> ON <input type="radio"/> OFF	
Isolate	<input type="radio"/> ON <input checked="" type="radio"/> OFF	
WMM	<input checked="" type="radio"/> ON <input type="radio"/> OFF	
Channel	1 (2.412 GHz) ▼	
Distance	0 M (1-50000, 0 is auto.)	
Encryption	None ▼	

Apply

Parameter	Description
Mode	WAP-8000 supports not only AP mode, but also provides Bridge, AP Client, CPE Router (WISP) mode. In Default, WNRT-6200 will work with AP mode.
SSID	It shows the SSID of this WAP-8000. The SSID is the unique name of WAP-8000 and shared among its service area, so all devices attempts to join the same wireless network can identify it.
Frequency Band	It shows the current wireless operating frequency.
4-Address Headers	Display the “4-Address Headers” Status.(Enable or Disable)
Isolate	Show the “Isolate” function is on or off
WMM	Click Enabled/Disabled to init WMM feature.
Channel	It shows the wireless channel connected currently.
Distance	Setup “Distance” according to the longest link distance between the point to point or point to multi-point in the network.
Encryption	Display Encryption mode.

5.2 IP Settings

This page allows you Setting IP address information.

Device IP

Network IP Settings

☒ Device IP ☐ IP Alias

☐ DHCP Client

☒ Static IP

IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Netmask Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Default Gateway	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
DNS Server	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>

Parameter	Description
DHCP Client	Getting the IP address from DHCP device.
Static IP	Setting the Static IP address to WAP-8000.

IP Alias

Network IP Settings

☐ Device IP ☒ IP Alias

☒ Enable IP Alias

IP Address	<input type="text"/> 192 . <input type="text"/> 168 . <input type="text"/> 1 . <input type="text"/> 1
Netmask Address	<input type="text"/> 255 . <input type="text"/> 255 . <input type="text"/> 0 . <input type="text"/> 0

Parameter	Description
IP Alias	Getting the IP address from DHCP device.

5.3 Antenna Settings

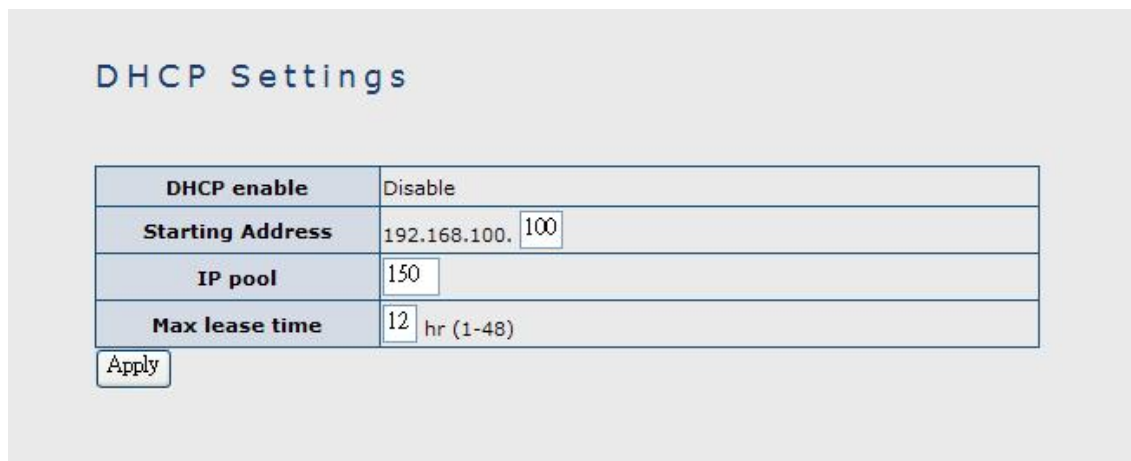
This page allows you selecting antennas for transmission. For WAP-8000 model, it only supports one antenna connector, **please sincerely advice to left it as default value for normal operation.**



The screenshot shows the 'Antenna Settings' page. It features a title 'Antenna Settings' at the top. Below the title, there are two radio buttons: 'Antenna1' (which is selected) and 'Antenna2'. At the bottom left, there is an 'Apply' button.

5.4 DHCP Settings

When enable as CPE router (WISP) mode, DHCP settings can be configuration.



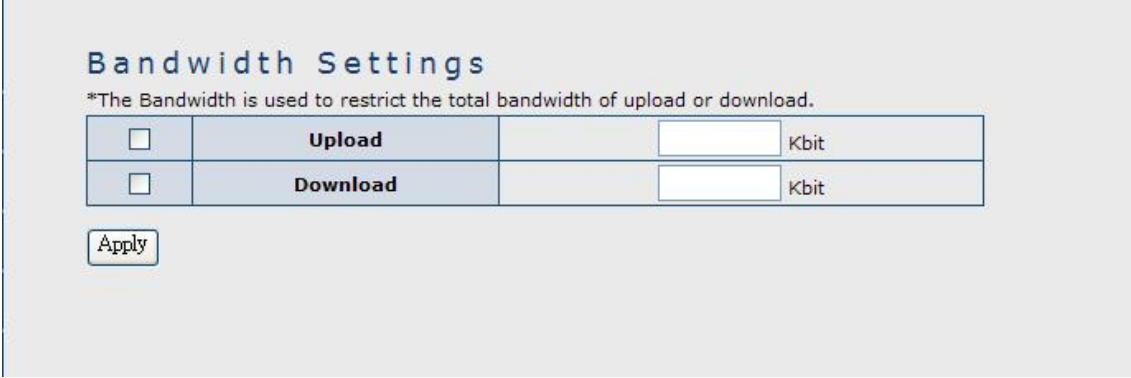
The screenshot shows the 'DHCP Settings' page. It features a title 'DHCP Settings' at the top. Below the title, there is a table with four rows. The first row is 'DHCP enable' with a value of 'Disable'. The second row is 'Starting Address' with a value of '192.168.100.' and a text input field containing '100'. The third row is 'IP pool' with a text input field containing '150'. The fourth row is 'Max lease time' with a text input field containing '12' and a label 'hr (1-48)'. At the bottom left, there is an 'Apply' button.

DHCP enable	Disable
Starting Address	192.168.100. <input type="text" value="100"/>
IP pool	<input type="text" value="150"/>
Max lease time	<input type="text" value="12"/> hr (1-48)

Chapter 6 Device

6.1 Bandwidth

This page allows you limit the total upload or download stream. Be noticed, it's only available in AP Client mode.



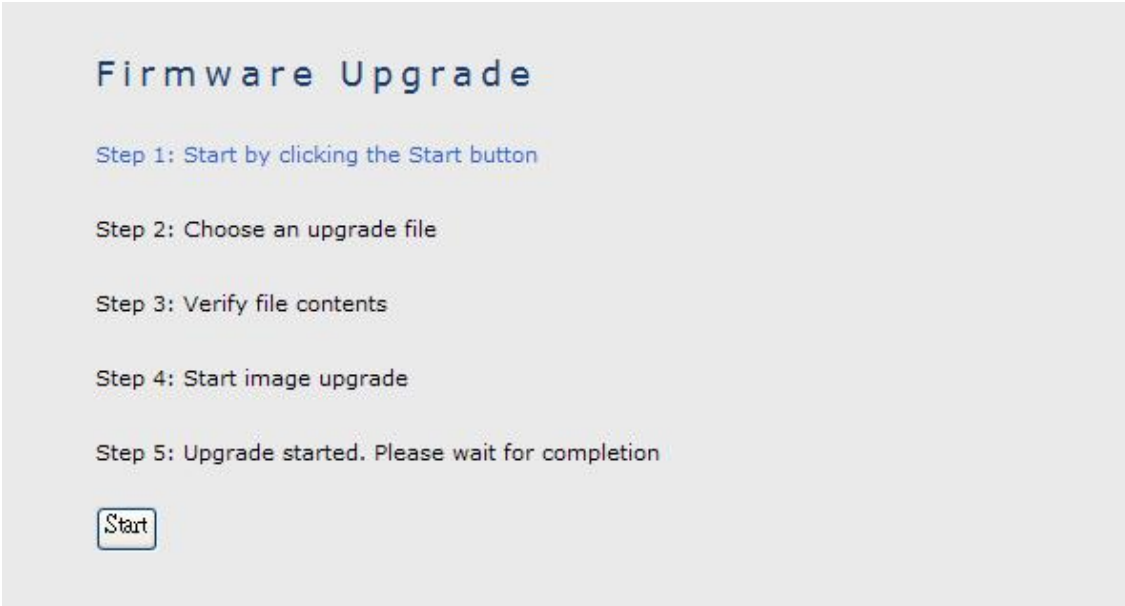
The screenshot shows the 'Bandwidth Settings' page. At the top, the title 'Bandwidth Settings' is displayed in a blue font. Below the title, a note states: '*The Bandwidth is used to restrict the total bandwidth of upload or download.' There is a table with two rows. The first row is for 'Upload' and the second row is for 'Download'. Each row has a checkbox on the left, a label in the middle, and a text input field followed by 'Kbit' on the right. Below the table is an 'Apply' button.

<input type="checkbox"/>	Upload		Kbit
<input type="checkbox"/>	Download		Kbit

Apply

6.2 Firmware Upgrade

This page allows you upgrade new firmware. Please follow the steps for upgrading.



The screenshot shows the 'Firmware Upgrade' page. The title 'Firmware Upgrade' is at the top in a blue font. Below the title, there are five steps listed: 'Step 1: Start by clicking the Start button' (in blue), 'Step 2: Choose an upgrade file', 'Step 3: Verify file contents', 'Step 4: Start image upgrade', and 'Step 5: Upgrade started. Please wait for completion'. At the bottom of the page is a 'Start' button.

Firmware Upgrade

Step 1: Start by clicking the Start button

Step 2: Choose an upgrade file

Step 3: Verify file contents

Step 4: Start image upgrade

Step 5: Upgrade started. Please wait for completion

Start

6.3 Device Reboot

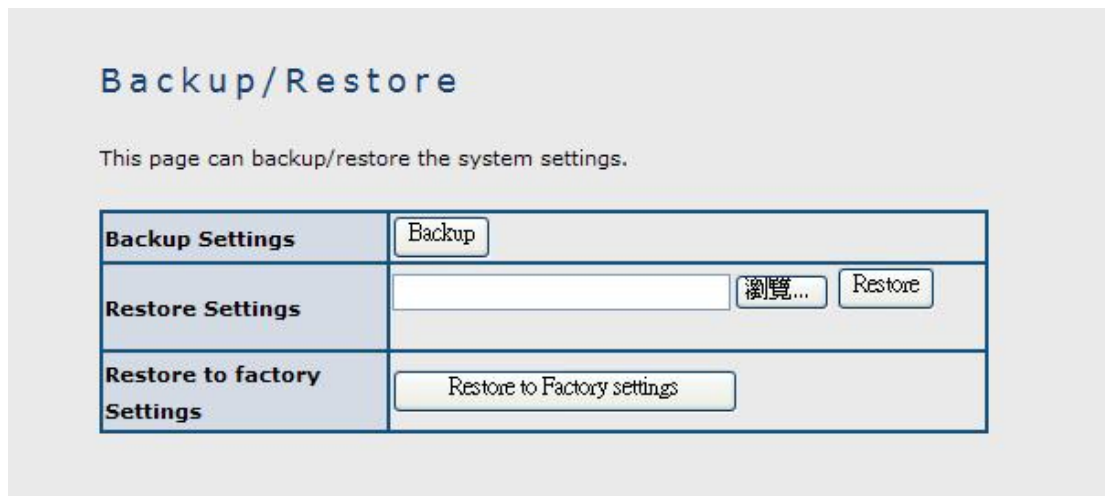
This page allows you reboot WAP-8000.



The screenshot shows a web interface titled "Device Reboot". Below the title, it asks "Do you want to reboot?". There is a single button labeled "Yes".

6.4 Backup / Restore

This page allows you backup or restore the configuration file you've saved. "Restore to factory Settings" button allow you reset to factory default vale, or via reset button on hardware.



The screenshot shows a web interface titled "Backup/Restore". Below the title, it says "This page can backup/restore the system settings." There is a table with three rows:

Backup Settings	<input type="button" value="Backup"/>
Restore Settings	<input type="text"/> <input type="button" value="瀏覽..."/> <input type="button" value="Restore"/>
Restore to factory Settings	<input type="button" value="Restore to Factory settings"/>

6.5 Hostname

This page allows you modify the name of WAP-8000.

Hostname

Hostname	<input type="text" value="default"/>
----------	--------------------------------------

Apply



Chapter 7 Security

7.1 Access Control

Via wireless MAC addresses control, you can set certain wireless client for accept or deny accessing WAP-8000.

Access Control

☐ None ☒ Accept ☐ Deny

MAC Address	<input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>  
Accept List	
The Accept List is empty.	

Apply

7.2 SNMP Settings

This page allows you set SNMP configuration for management.

SNMP Settings

☒ Enable SNMP

Read Only(RO)

Source / Hostname	<input checked="" type="radio"/> Allow all <input type="radio"/> Deny all <input type="radio"/> Specific IP/Hostname
Community Name	<input type="text" value="public"/>

Read and Write(RW)

Source / Hostname	<input type="radio"/> Allow all <input checked="" type="radio"/> Deny all <input type="radio"/> Specific IP/Hostname
Community Name	<input type="text" value="private"/>

Apply

7.3 Password Settings

The password of the user interface can be changed here. Please enter the new password and confirm the new password, then press “Change” button to enable the new password.

Password Settings

New Password	<input type="password"/>
Confirmed Password	<input type="password"/>

Chapter 8 Localization

8.1 NTP Settings

This page is used to configure NTP client to get current time.

Network Time Protocol

First NTP server IP/Hostname	<input type="text" value="pool.ntp.org"/>	port <input type="text" value="123"/>
Second NTP server IP/Hostname	<input type="text" value="ntp.ubuntu.com"/>	port <input type="text" value="123"/>
TimeZone Setting	<input type="text" value="GMT-12"/> ▼	

8.2 Country Code Settings

The country code can be selected here to fit the local restriction law. Changing country code will cause the available channel changes.

****Be notice, when select:**

ETSI (1), the RF output power supports options: Full, 1/2, 1/4, 1/8, 1/16

ETSI (2), the RF output power supports options: Full, 1/2, 1/4

Country Code Settings

Current Country	<input type="text" value="WILDCARD"/> ▼
-----------------	---

- WILDCARD
- ETSI(2)
- ETSI(1)
- Japan
- United States